

Product datasheet for **SC126949**

Calpain 3 (CAPN3) (NM_173090) Human Untagged Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Calpain 3 (CAPN3) (NM_173090) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Calpain 3 |
| Synonyms: | CANP3; CANPL3; LGMD2; LGMD2A; LGMDD4; LGMDR1; nCL-1; p94 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >OriGene ORF within SC126949 sequence for NM_173090 edited (data generated by NextGen Sequencing) |

```
ATGGAGATCTGTGCAGATGAGCTCAAGAAGGTCCTTAACACAGTCGTGAACAAACAAG
GACCTGAAGACACACGGGTTTCACTGGAGTCCTGCCGTAGCATGATTGCGCTCATGGAT
ACAGATGGCTCTGAAAGCTCAACCTGCAGGAGTTCCACCACCTCTGGAACAAGATTAAG
GCCTGGCAGAAAATTTTCAAACACTATGACACAGACCAGTCCGGCACCATCAACAGCTAC
GAGATGCGAAATGCAGTCAACGACGCAGGATTCCACCTCAACAACCAGCTCTATGACATC
ATTACCATGCGGTACGCAGACAAACACATGAACATCGACTTTGACAGTTTCATCTGCTGC
TTCGTTAGGCTGGAGGGCATGTTTCAGAGCTTTTCATGCATTTGACAAGGATGGAGATGGT
ATCATCAAGCTCAACGTTCTGGAGTGGCTGCAGCTCACCATGTATGCCTGA
```

Clone variation with respect to NM_173090.1



[View online »](#)

| | |
|-------------------------------------|--|
| 5' Read Nucleotide Sequence: | >OriGene 5' read for NM_173090 unedited NNGGGCTGCATTTGTATACGACTCATATAGGGCGGCCGGAATTCGCACGAGGCACAGGC GATTGGTTTTAGTGGTAGGTGTGTGGGGATCTGTTCTGGTCATCTGGATGCTGGTCATCG GTGTGCAGTATTGATCAGGACCTGCAAACCCAAAAGCTTATGGGAGCTGGCAGTCACAA AAAGAAAAAACAAGCCACAGCCTGGCAGCTCTGATCAGGAAAGTGAGGAACAGCAACA ATTCGGAACATTTTCAAGCAGATAGCAGGAGATGACATGGAGATCTGTGCAGATGAGCT CAAGAAGTCCCTTAACACAGTCGTGAACAAACACAAGGACCTGAAGACACACGGGTTCCAC ACTGGAGTCCTGCCGTAGCATGATTGCGCTCATGGATACAGATGGCTCTGGAAAAGCTCAA CCTGCAGGAGTTCCACCACCTCTGGAACAAGATTAAGGCCTGGCAGAAAATTTTCAAACA CTATGACACAGACCAGTCCGGCACCATCAACAGCTACGAGATGCGAAATGCAGTCAACGA CGCAGGATTCCACCTCAACAACCAGCTCTATGACATCATTACCATGCGGTACGCAGACAA ACACATGAACATCGACTTTGACAGTTTCATCTGCTGCTTCGTTAGGCTGGAGGGCATGTT CAGAGCTTTTCATGCATTTGACAAGGATGGAGATGGTATCATCAAGCTCAACGTTCTGGA GTGGCTGCAGCTACCATGTATGCCTGAACCAAGCTGGCCTCATCAAAGCCATGCAGGA TCACTCAGGATTTCAAGTTTACCCTCTATTTTCAAAGCCCTTTACCTCANAGGACCCAGC AGCTACACCCCTACAGGCTTCCAG |
| Restriction Sites: | Please inquire |
| ACCN: | NM_173090 |
| OTI Disclaimer: | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| Components: | The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water). |
| Reconstitution Method: | <ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C. |
| RefSeq: | NM_173090.1 , NP_775113.1 |
| RefSeq Size: | 1309 bp |
| RefSeq ORF: | 471 bp |
| Locus ID: | 825 |
| UniProt ID: | P20807 |
| Cytogenetics: | 15q15.1 |
| Protein Families: | Druggable Genome, Protease |

Gene Summary:

Calpain, a heterodimer consisting of a large and a small subunit, is a major intracellular protease, although its function has not been well established. This gene encodes a muscle-specific member of the calpain large subunit family that specifically binds to titin. Mutations in this gene are associated with limb-girdle muscular dystrophies type 2A. Alternate promoters and alternative splicing result in multiple transcript variants encoding different isoforms and some variants are ubiquitously expressed. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (6) differs in the 5' UTR and uses a downstream start codon, compared to variant 1. It encodes isoform e, which has a shorter N-terminus compared to isoform a.